

PRELIMINARY LISTS OF NEW ENGLAND
PLANTS,—XIV.¹

ALFRED REHDER.

[The sign + indicates that an herbarium specimen has been seen; the sign — that a reliable printed record has been found.]

CORNACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
<i>Cornus alternifolia</i> , L. f.	+	+	+	+	+	+
“ <i>Amomum</i> , Mill.	+	+		+	+	+
“ <i>canadensis</i> , L.	+	+	+	+	+	+
“ <i>circinata</i> , L'Hér.	+	+	+	+	+	+
“ <i>florida</i> , L.	—	—	+	+	+	+
“ <i>paniculata</i> , L'Hér.	+	+	+	+	+	+
“ “ × <i>Purpusi</i>				+		
“ <i>Purpusi</i> , Koehne.		+	+	+	+	+
“ <i>stolonifera</i> , Michx.	+	+	+	+		+
<i>Nyssa sylvatica</i> , Marsh.	+	+	+	+	+	+

CAPRIFOLIACEAE.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
<i>Diervilla Lonicera</i> , Mill.	+	+	+	+	+	+
<i>Linnaea borealis</i> , L.	+	+	+	+		+
<i>Lonicera canadensis</i> , Marsh.	+	+	+	+		+
“ <i>coerulea</i> , L.	+	+	+	+	+	+
“ <i>dioica</i> , L.	+	+	+	+	+	+
“ <i>hirsuta</i> , Eat.			+	—		
“ <i>japonica</i> , Thunb.						+
“ <i>Morrowii</i> , Gray				+		
“ <i>oblongifolia</i> , Hook.	+		+			
“ <i>sempervirens</i> , L.	+			+	+	+
“ <i>tatarica</i> , L.	+		+	+		+
“ <i>Xylosteum</i> , L.					+	
<i>Sambucus canadensis</i> , L.	+	+	+	+	+	+
“ <i>racemosa</i> , L.	+	+	+	+	+	+

¹ Printed in RHODORA as supplementary material.

	Me.	N. H.	Vt.	Mass.	R. I.	Conn.
<i>Symphoricarpus orbiculatus</i> , Moench.				+	+	
“ <i>racemosus</i> , Michx.	+	+	+	+	+	
“ “ var. <i>pauciflorus</i> Robbins			+	+		
<i>Triosteum angustifolium</i> , L.						+
“ <i>aurantiacum</i> , Bickn.	+	+	+	+	+	+
“ <i>perfoliatum</i> , L.						+
<i>Viburnum acerifolium</i> , L.	+	+	+	+	+	+
“ <i>alnifolium</i> , Marsh.	+	+	+	+	+	+
“ <i>cassinoides</i> , L.	+	+	+	+	+	+
“ <i>dentatum</i> , L.	+	+	+	+	+	+
“ <i>Lentago</i> , L.	+	+	+	+	+	+
“ <i>nudum</i> , L.						+
“ <i>Opulus</i> , L.	+	+	+	+		+
“ <i>pauciflorum</i> , Pylaie	+	+	+			
“ <i>prunifolium</i> , L.						+
“ <i>pubescens</i> , Pursh.			+			+
“ <i>venosum</i> , Britton				+		

NOTES ON THE ABOVE LIST.

Cornus Purpusi, Koehne¹ is a recent segregate of *C. Amomum* Miller (*C. sericea*, L.) and was first described from plants raised in Germany from seeds collected near Toledo, Ohio, by C. A. Purpus. It is chiefly distinguished from *C. Amomum* by the numerous papillae on the epidermis on the under side of the leaves which appears therefore glaucous, while in *C. Amomum* the epidermis is perfectly smooth and the color of the under side usually green. Other characters of *C. Purpusi* are the generally narrower leaves, cuneate at the base and with only 4 to 5 or rarely 6 pairs of veins usually furnished with pale pubescence, the smaller flowers and inflorescence and its more appressed pubescence, the paler color of the branches, the but slightly ribbed stone and the usually much paler often almost whitish fruit. The habit of the shrub is looser and especially the more or less pendulous leaves give it a distinct appearance from *C. Amomum* which has broader leaves with 4 to 8 pairs of veins and a usually rounded base and stouter petioles. *Cornus Purpusi* ranges from

¹Gartenfl. 48:338 (1899); Mitt. Deutsch. Dendr. Ges. 12:48 (1903); Rehder in Sargent's Trees & Shrubs 1:77, pl. 40 (1903).

New England westward through the Lake region and the Central States, while *C. Amomum* is strictly Alleghanian. In New England both species occur and intermediate forms are occasionally met with.

Cornus paniculata × *Purpusi* = *C. Arnoldiana*, Rehder¹ is a hybrid which originated spontaneously in the Arnold Arboretum. As the two parent species grow not unfrequently together in New England, it is to be expected that this hybrid will be found elsewhere. It is probably best described as a *Cornus paniculata* with the branches of last year purplish instead of grayish.

Cornus stolonifera has been reported from Rhode Island, but the only specimen I have seen under this name from that state proved to be *C. Amomum*.

Linnaea borealis. The American plant has been distinguished from the type which occurs in Europe and Northern Asia as *L. borealis*, var. *americana* (*L. americana*, Forbes). It is, however, hardly specifically distinct as considered by Britton in his Manual. The only locality known in Rhode Island where it had been collected by S. T. Olney has long been obliterated (see RHODORA 2: 218).

Lonicera canadensis. This species is better known under the name *L. ciliata*, Muhlenberg, but since Marshall's name is about 30 years older and the species is recognizable from his description, it has to supersede Muhlenberg's later name.

Lonicera coerulea. The American plant, at least that of northeastern North America, belongs to *L. coerulea*, var. *villosa*, Torrey & Gray, which varies greatly in the pubescence and shape of the leaves. It is chiefly distinguished from the type by its more or less upright winter buds and the glabrous campanulate corolla.

Lonicera hirsuta. The only specimens I have seen from the New England states were collected near Middlebury, Vermont, by E. Brainerd. No specimen from the type locality, which is Williams-town, Mass., could be found in any of the herbariums consulted. At the time of its discovery by Eaton, about 85 years ago, it seems to have been plentiful there, for he says in his Manual (ed. 6, p. 210) that two miles west of Williams College he saw "hundreds in flower climbing the trees and shrubs of an elevated ridge or hill in the summer of 1817." If the wood where Eaton found it has not entirely disappeared, the plant probably still exists there and a thorough search at the flowering time, about middle of June, in the region

¹ Rehder in Sargent's Trees & Shrubs 1: 79, pl. 39 (1902).

described might lead to the rediscovery of this species at its type locality. Eaton also mentions that it had been found later near Worcester, Mass., and Middlebury, Vermont. At the latter locality it was rediscovered by E. Brainerd in 1880 (Herb. Univ. Vermont).

Lonicera oblongifolium. Specimens under this name from Rhode Island collected by W. W. Bailey near Olneyville proved to be the European *L. Xylosteum*.

Lonicera japonica, *L. Morrowii*, *L. sempervirens*, *L. tatarica*, and *L. Xylosteum*, also *Symphoricarpus orbiculatus*, Moench (*S. vulgaris*, Michaux) have been found escaped from cultivation and well established. As several of them have maintained themselves for a considerable time and are spreading and those which have been observed but recently will in all probability do likewise, they ought not to be omitted from an account of the flora of New England. *L. japonica* which is, according to Mr. C. H. Bissell, a not uncommon escape along the coast of Connecticut was found last year also in Massachusetts by Mr. L. A. Wentworth of Lynn who informs me that he discovered at Essex a large number of plants of this species along a roadside some distance from any habitation.

Sambucus racemosa. The American plant is often considered a distinct species, *S. pubens* Michaux (*S. racemosa*, var. *pubens*, Koehne), chiefly distinguished by its pubescence from the glabrous European type.

Triosteum perfoliatum. This species seems to occur only in Connecticut; all specimens from other states I have seen proved to be *T. aurantiacum*.

Viburnum alnifolium. From Rhode Island I have seen no specimen but one from S. F. Olney's herbarium (Herb. Brown Univ.) As this had been collected probably about 60 years ago, the locality may now possibly be obliterated.

Viburnum nudum has been found only in Connecticut. All specimens from other states named *V. nudum* which I have seen, belonged to *V. cassinoides*.

Viburnum Opulus. From the European type the American plant differs chiefly in the open shallow groove and the smaller more numerous glands of the petiole and in the orange red, not scarlet fruit. It has been distinguished as *V. americanum*, Miller (*V. Opulus*, var. *americanum*, Aiton).

Viburnum prunifolium. Besides the type there has been found in

Connecticut near Greenwich, a form with smaller globose fruits, *V. prunifolium*, var. *globosum*, Nash (Herb. C. H. Bissell).

Viburnum pubescens. As this species occurs in Vermont and Connecticut, it may be looked for in western Massachusetts. It has been reported but probably erroneously from New Hampshire (W. S. Harris, Flora of the town of Windham, p. 17). A specimen I received as *V. pubescens* from New Hampshire (Herb. Dartmouth Coll., Hanover) proved to be *V. acerifolium*.

Viburnum venosum. Under this name Britton has recently separated the northern form of *V. molle* of Gray (*V. scabrellum*, Chapman) from the form of the southern states which he takes for the type. Though the morphological characters by which the two species are distinguished appear rather slight, both are quite distinct in their general appearance and seem really less closely related to each other than *V. venosum* is to *V. dentatum*. As regards the name *V. molle* which has been left to the southern form, a closer study of the matter has led me to the conviction that *V. molle* of Gray and subsequent authors is not the *V. molle* of Michaux, but the *V. dentatum*, var. *semitomentosum*, Michaux, while the typical *V. molle*, Michaux, is identical with the species recently described as *V. Demetrionis*. Although *V. molle*, Gray, if *V. venosum* is considered a distinct species, is not included in the flora of New England, I suppose it will not seem out of place to insert here the following notes intended to make clear the somewhat confused synonymy of *V. molle*, especially as it will show conclusively that the name *V. molle* can never be used for the New England plant.

VIBURNUM MOLLE, Michaux, Fl. 1: 180 (1803). *V. Demetrionis*, Deane & Robinson, Bot. Gaz. 22: 167, pl. 8 (1896); 24: 436 (1897); Britton & Brown, Ill. Fl. 3: 231, fig. 3441 (1898); Britton, Man. 871 (1901).

This species has been found only in Kentucky and Missouri.

It had always seemed improbable to me that Michaux really should have considered one and the same species, even if represented by somewhat different forms, as a variety of *V. dentatum* and also as a distinct species allied to *V. Opulus*, and as furthermore the description of *V. molle*, Michaux, did not fit very well the *V. molle* of Gray, I concluded to follow the matter up. Mr. Fernald to whom I spoke about it before he left for Europe last summer, kindly promised me to look up the species in Michaux's herbarium. He brought back a

good photograph of Michaux's type which enabled me, almost as well as if I had had the specimen itself, to study the characters of *V. molle*; a close examination made it soon apparent that it could not be identical with *V. molle* of Gray, as the petioles are stipulate and the venation and serration of the leaves perceptibly different. Of the species with stipulate petioles *V. Demetrionis* seemed to be the most similar and indeed its deeply cordate leaves and their venation and serration agrees perfectly with Michaux's specimen; also Michaux's description, especially as regards "fructibus oblongo-ovatis" and "cortice quotannis laceratim deciduo" fits *V. Demetrionis* exactly, but not at all *V. molle* of Gray. Michaux also apparently observed the stipules and for this reason characterized it as a "V. Opulus foliis indivisis." To make the evidence conclusive the *V. molle* has been recently rediscovered at the type locality, Danville, Kentucky, by Mr. Boynton of Baltimore and Mr. C. D. Beadle remarked in a letter regarding this discovery that the specimen look much like *V. Demetrionis* and that Michaux's description likewise agrees very well with that species. A specimen which he sent a short time afterwards to the Arnold Arboretum leaves no doubt that Boynton's specimen is identical as well with Michaux's *V. molle* as with *V. Demetrionis*.

VIBURNUM BRACTEATUM, Rehder in Sargent's Trees & Shrubs 1: 135, pl. 68 (1903). *V. molle*, Chapman, Fl. ed. 3. 190 (1897), not Michaux.

This species is known only from the cliffs of the Coosa River near Rome, Georgia. It differs from *V. molle* chiefly in its conspicuous bracts, the semiorbicular calyx teeth, the shorter petioles, the remotely and shallowly dentate leaves and the close bark.

VIBURNUM **semitomentosum**, comb. nov. *V. dentatum* β *semitomentosum*, Michaux, Fl. 1: 179 (1803). *V. dentatum* β ? *scabrellum*, Torrey & Gray, Fl. 2: 16 (1841). *V. scabrellum*, Chapman, Fl. 172 (1860). *V. molle*, Gray, Man. ed. 5, 206 (1867); Syn. Fl. 1, 2: 11, in part (1884); Britton & Brown, Ill. Fl. 3: 231, in part, fig. 3440 (1898); Dippel, Handb. Laubholzk. 1: 184, in part (1889); not Michaux. *V. molle*, var.? *tomentosum*, Chapman, Fl. ed. 3, 190 (1897).

This species is distributed from Kentucky to Florida and Texas. It differs from *V. venosum* by the thinner and fewer veins, the shallower often crenate dentation with fewer and larger obtusish teeth, the oval or ovate rarely orbicular leaves generally truncate at the

base, the larger flowers and fruits and the reddish brown branches. Gray quotes "*V. dentatum semitomentosum* Michx., in part" as well under his *V. molle* as under *V. pubescens* and refers to the latter species, Michaux's specimens from Lake Champlain, but as Michaux himself excludes those specimens from his var. *semitomentosum* and quotes in his Flora as locality only "in Carolinae inferioris dumetosis," it seems hardly correct to quote part of his var. *semitomentosum* as synonymous with *V. pubescens*.

VIBURNUM VENOSUM, Britton, Man. 871 (1901); Rehder in Sargent's Trees & Shrubs 1:85, pl. 43 (1903). *V. molle*, Gray, Syn. Fl. 1, 2:11, in part (1884); Dippel, Handb. Laubholz. 1:184, fig. 115, in part (1889); Watson & Coulter in Gray, Man. ed. 6, 218, in part (1890); Sargent, Gard. & For. 4:29, fig. 8 (1891); Zabel, Möller's Deutsch. Gärt.-Zeit. 6:267, fig. (1891); Koehne, Deutsch. Dendr. 537 (1893); not Michaux. *V. Hanceanum*, Dippel, l. c. 176, fig. 107 (1889), not Maximowicz.

This species ranges from eastern Massachusetts to Pennsylvania and Delaware, and reappears in a peculiar form in S. Carolina. It differs from the preceding species chiefly in the more numerous and more prominent veins, the acute callous-tipped and more numerous teeth, the generally subcordate leaves, glabrous or nearly so above, those below the inflorescence suborbicular, the smaller flowers and fruits and the grayish or yellowish brown branches. In European gardens it has long been in cultivation and is occasionally met with as *V. pubescens*, *V. nepalense* and *V. asiaticum*. The two following varieties merit distinction.

V. VENOSUM, var. **Canbyi**, var. nov. Differs from the type by its thinner, less pubescent leaves, often only pubescent along the midrib beneath, especially those below the inflorescence much larger, often 5 to 8 cm. broad and the larger inflorescence like the young branchlets only slightly pubescent. This is apparently the form mentioned by Torrey & Gray in their Flora as intermediate between *V. dentatum* and *V. dentatum scabrellum*. Some remarks regarding the pubescence in the description of *V. dentatum* by Darlington¹ and by Beck² refer probably also to this form.—DELAWARE, Wilmington, July 2 and Aug. 22, 1902, Christiana, Aug. 25, 1902, New Castle, July 2, 1902, *W. M. Canby*. PENNSYLVANIA, Westchester, Oct. 8,

¹ Fl. Cestr. ed. 2, 203 (1837).

² Bot. U. S. 145 (1856).

1902, *W. M. Canby*, Mt. Hope, June 24, 1901, *A. A. Heller*. S. W. VIRGINIA, July 16, 1892, *J. K. Small*. This form has been for many years in cultivation at the Arnold Arboretum, where it was received under the name *V. laevigatum* from the nursery of Parsons & Son, Flushing, Long Island. As an ornamental shrub it is superior to *V. dentatum* and *V. venosum* on account of its larger corymbs and larger dark green foliage and more vigorous habit.

V. VENOSUM, var. **longifolium**, comb. nov. *V. dentatum*, var. *longifolium*, Dippel, l. c. 183 (1889); Koehne, Deutsch. Dendr. 537 (1893). *V. longifolium*, "Loddiges" Zabel, in Beissner, Schelle & Zabel, Handb. Laubholz-Ben. 441 (1903). This form known only in cultivation differs in its narrower and longer leaves, pubescent on both sides, more densely beneath, with single or forked hairs. In the plant cultivated at the Arnold Arboretum the inflorescence and the young branchlets are glabrous, but as Dippel and Koehne say that they are either glabrous or pubescent, I am inclined to refer here a *Viburnum* collected by Dr. Mellichamp in 1878 near Bluffton, S. C. (herb. Gray) which has the inflorescence and the young branchlets stellate-tomentose, but agrees otherwise with the cultivated plant.

ARNOLD ARBORETUM.

NOTES ON PUBLICATIONS RECENTLY RECEIVED.

Professor T. C. Porter's long expected (now alas posthumous) *Flora of Pennsylvania* is at hand,¹ having been edited and provided with analytical keys by Dr. J. K. Small, the nephew of author. The work is an excellently printed royal octavo volume of 362 pages enumerating no less than 2201 species. It is restricted to the spermatophytes and the sequence of orders and families is essentially that of Engler & Prantl's *Natürlichen Pflanzenfamilien*. However, several departures from this arrangement are made, and not always with happy results. Thus the *Compositae* are divided, as by several recent writers, into three families, the *Cichoriaceae*, *Ambrosiaceae*, and *Compositae*. About the practical value of this division there will of course be a difference of opinion, but if it is made, there would certainly

¹ *Flora of Pennsylvania* by Thomas Conrad Porter, D. D., LL. D. Ed. by John Kunkel Small, Ph. D. Ginn & Co., Boston, 1903.